

Table 1

Summary of IDW Stored at WVOW

Site ID	Description	Date(s) Generated	Soil Cuttings	Aqueous Wastes	Other Non-Indigenous IDW	Total
AOC-3	Pt Pleasant Landfill Leachate Monitoring Wells	Jun-95	47		1	48
Various AOCs	Areas of Concern	Apr-97		2		2
Data Gaps	Site-Wide Data Gaps	Dec-97	4			4
ESI-1	Magazine Area	Feb- to Mar-97	3	11	3	17
ESI-2	Acid Dock Area	1994 to Mar-95	8	13	1	22
ESI-3	Tract 21 Area	Mar-95	4			4
ESI-4	Red Water Outfall Sewer	Nov-94			2	2
ESI-9	Classification Yards	Mar-95 to Jan-96	44	62	2	108
LTMP	1997 Long Term Monitoring	Dec-97		87		87
OU-1	1993 - 1995 LTMP	Oct-93 to Oct-95	6	49	9	64
OU-10	South Acids Area	Jan-95		2		2
OU-11	Sellite Manufacturing Area	Feb- to Mar-94		6		6
OU-12	North & South Powerhouses	Feb- to Mar-95	3	3	2	8
OU-2	Red Water Reservoir	Jul- to Aug-95	16	1		17
OU-3	Yellow Water Reservoir	Jun-95 to Jun-96	28	14	1	43
OU-5	Pond 13 / Wet Wells	Jan- to Feb-95		2	2	4
OU-6	Ponds 7/11/21/23	Nov-94		3	1	4
OU-8	TNT Manufacturing Area	Oct-93 to Feb-94			8	8
OU-9	TNT Manufacturing Area	Sep-93	1	1		2
Supplementary LTMP	Site-Wide Data Gaps	Apr- to Dec-97	3	2		5
Unidentified			7	18	2	27
TOTAL			174	276	34	484

Table 2

**Summary of TCLP Results
Monitoring Well Soil Cuttings**

(Page 1 of 3)

Site ID	Well ID	Drum ID's	TCLP Results		TCLP Standards (ug/L)	
			Parameter	Concentration (ug/L)		
AOC3	PPLGW-008		Barium	945	100000	
	PPLGW-009		Barium	475	100000	
	PPLGW-010	1-P	Barium	356	100000	
	PPLGW-011	1-R	Barium	386	100000	
	PPLGW-012	1-J	Barium	227	100000	
	PPLGW-013	1-T	Barium	880	100000	
			Carbon tetrachloride	29	57	wastewater
	PPLGW-008D	7-O	Barium	253	100000	
	PPLGW-009D	1-M, 2-M, 3-M, 4-M, 5-M, 6-M, 7-M, 8-M, 9-M, 10-M	Barium	335	100000	
	PPLGW-010D		Barium	379	100000	
	PPLGW-011D	1-S, 2-S, 3-S, 4-S, 5-S, 6-S, 7-S, 8-S, 9-S, 10-S	Barium	649	100000	
	PPLGW-012D	1-K, 2-K, 3-K, 4-K, 5-K, 6-K, 7-K, 8-K, 9-K, 10-K, 11-K	Barium	748	100000	
	PPLGW-013D	2-U, 2-U, 3-U, 4-U, 5-U, 6-U, 7-U, 8-U, 9-U, 10-U, 11-U	Barium	487	100000	
			Carbon tetrachloride	43	57	wastewater
			Chromium	13	5000	
ESI1	MZAGW-001	106-D, 107-D	Barium	534	100000	
	MZAGW-002	108-D	Barium	666	100000	
ESI2	ACDGW-001	37-B, 38-B, 39-B, 40-B, 41-B, 42-B, 43-B, 113-D	Barium	251	100000	
			Chloroform	6 J	46	wastewater
	ACDGW-002	113-D	2-Butanone	8 J	280	wastewater
			Barium	768	100000	
ESI3	T21GW-001	127-D, 128-D	Chromium	16.1	5000	
			2-Butanone	7 J	280	wastewater
			Barium	551	100000	
			Chromium	12.4	5000	
	T21GW-002	25-E, 26-E	Trichloroethene	184		
			2-Butanone	6 J	280	wastewater
			Barium	998	100000	
			Chromium	15.9	5000	
	T21GW-003	All soils disposed of off-site by USACE Huntington District (1 drum)	Trichloroethene	7 J		
			2-Butanone	29 J	280	wastewater
			Barium	470	100000	
ESI9	MCYGW-001	1-BC, 1-BC, 2-BC	Trichloroethene	821		
	MCYGW-002	1-BB, 2-BB, 3-BB	Barium	401	100000	
	MCYGW-002D	1-BA, 2-BA, 3-BA, 4-BA, 5-BA, 6-BA, 7-BA, 8-BA, 9-BA, 10-BA	Barium	565	100000	
			Barium	248	100000	
	NAAGW-001	2-BD, 9-I	Barium	954	100000	
			Chromium	32.2	5000	

Table 2

**Summary of TCLP Results
Monitoring Well Soil Cuttings**

(Page 2 of 3)

Site ID	Well ID	Drum ID's	TCLP Results			TCLP Standards (ug/L)	
			Parameter	Concentration (ug/L)			
ESI-9 (continued)	NAAGW-001D	1-BD, 3-BD, 4-BD, 5-BD, 7-BD, 9-BD, 1-BE, 2-BE, 3-BE, 3-BE, 4-BE, 5-BE, 6-BE, 7-BE, 8-BE, 10-BE, 11-BE, 12-BE, 13-BE, 14-BE, 16-BE	Barium	603		100000	
	PPLGW-014	1-BG, 1-BG, 2-BG, 2-BG, 3-BG	Barium	222		100000	
	SELGW-005	1-BF	Barium	226		100000	
			Chromium	21.3		5000	
	OU12	NPHGW-002		Barium	528		100000
Chloroform				5 J		46	wastewater
Lead				273		5000	
NPHGW-002D			Barium	553		100000	
SPHGW-001			2-Butanone	8 J		280	wastewater
			Barium	272		100000	
			Cadmium	9		1000	
SPHGW-001D		82-B, 84-B	Barium	418		100000	
OU-2		RWRGW-002	1-Y	Barium	1180		100000
	RWRGW-003	1-AA	Barium	636		100000	
			Trichloroethene	6 J			
	RWRGW-004	1-X	Barium	1000		100000	
	RWRGW-002D	1-V, 1-V	Barium	828		100000	
	RWRGW-003D	1-Z, 1-Z, 2-Z, 2-Z, 3-Z, 4-Z, 5-Z, 6-Z, 7-Z	None Detected				
	RWRGW-004D	1-W	Barium	860		100000	
			Carbon tetrachloride	8 J		57	wastewater
			Tetrachloroethene	8 J			
OU-3	SAAGW-001D	1-I, 1-I, 2-I, 3-I, 4-I, 5-I, 6-I, 8-I	2,4-Dinitrotoluene	40		320	wastewater
			2-Butanone	26 J		280	wastewater
			Barium	1170		100000	
	YWRGW-002	1-H	Barium	143 B		100000	
			Chromium	52		5000	
	YWRGW-002D	1-G, 2-G, 3-G, 4-G, 5-G, 6-G, 7-G, 8-G, 9-G, 10-G, 11-G, 12-G, 13-G, 14-G, 17-G, 18-G	Barium	331		100000	
OU6	W07GW-002		2-Butanone	33 J		280	wastewater
			Barium	102		100000	
	W11GW-001		2-Butanone	37 J		280	wastewater
			Barium	556		100000	
	W21GW-003		2-Butanone	47 J		280	wastewater
			Barium	1300		100000	

Table 2

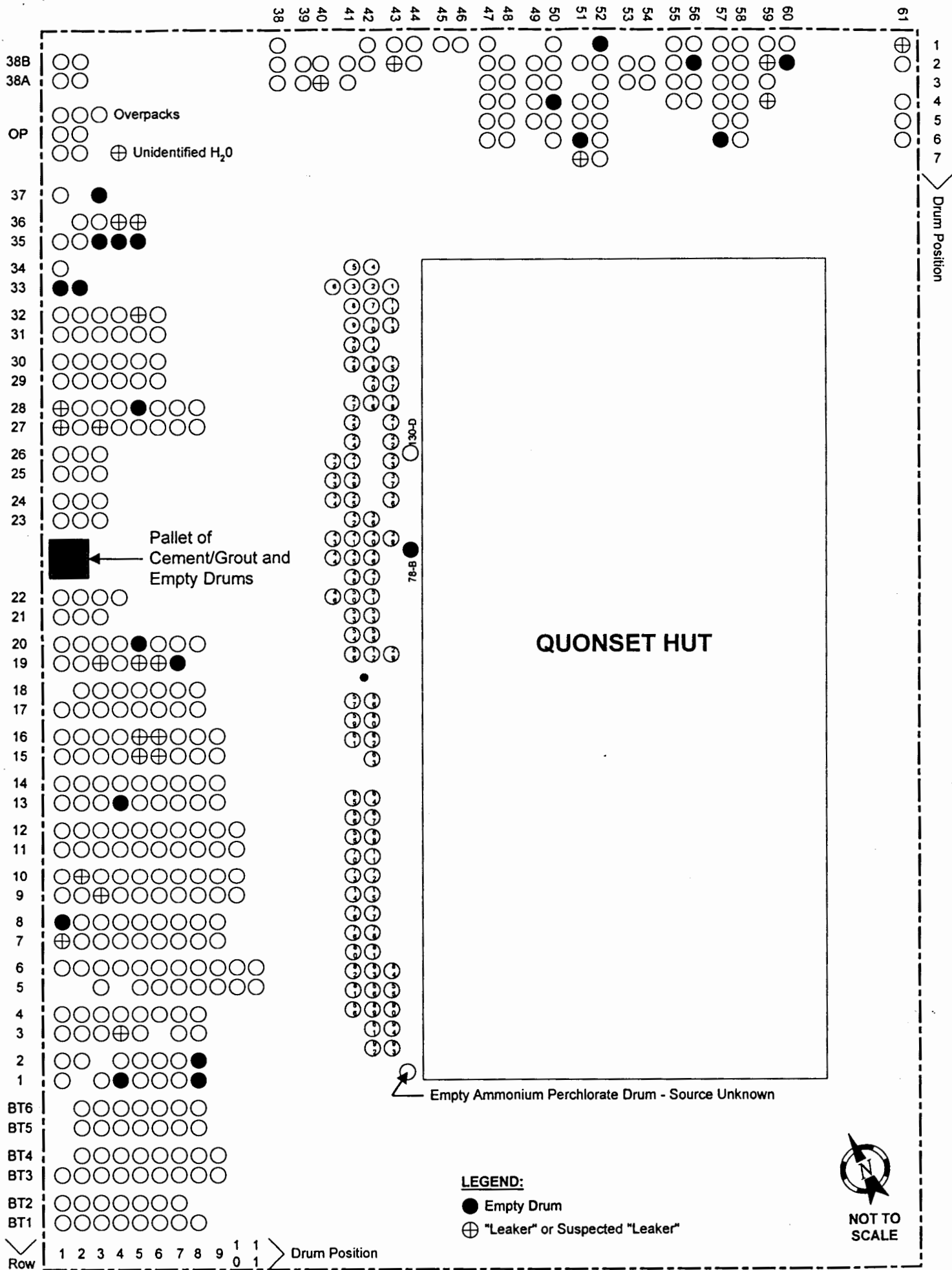
**Summary of TCLP Results
Monitoring Well Soil Cuttings**

(Page 3 of 3)

Site ID	Well ID	Drum ID's	TCLP Results		TCLP Standards (ug/L)	
			Parameter	Concentration (ug/L)		
OU-6 (continued)	W23GW-004		2-Butanone	36 J	280	wastewater
			Barium	576	100000	
			Selenium	127	5700	
Data Gaps	PWSGW-001	59, 60	None Detected			
	PWSGW-002A	57, 58	None Detected			
Supplementary LTMP	PWSGW-003	61, 62, 63	None Detected			

ATTACHMENT 1

**INVESTIGATION DERIVED WASTE INVENTORY & LOCATION MAP
WEST VIRGINIA ORDNANCE WORKS
MASON COUNTY, WEST VIRGINIA**



IDW LOCATION MAP - WEST VIRGINIA ORDNANCE WORKS (SEPTEMBER 1998)

**IDW Inventory by Position
West Virginia Ordnance Works**

10/06/1998

Drum ID	Row	Positio	Site	Location	Description	Date	Remarks
1 J	1	1	AOC3	PPLGW-012	Soil Cuttings	06/12/95	
22 E	1	3	ESI9	Baker Tank	Decon Solids/Water	03/24/95	Open Top
22 D	1	4	OU1	BGEGW-001	Purge Water	11/02/94	Leaker - Empty Drum
26 E	1	5	ESI3	T21GW-002	Soil Cuttings	03/25/95	
127 D	1	6	ESI3	T21GW-001	Soil Cuttings	03/23/95	
25 E	1	7	ESI3	T21GW-002	Soil Cuttings	03/25/95	
114 D	1	8	ESI2	PASGW-002	Purge Water	03/12/95	Leaker - Empty Drum
1 P	2	1	AOC3	PPLGW-010	Soil Cuttings	06/14/95	
38 E	2	2	ESI9	Baker Tank	Decon Water	03/24/95	
121 D	2	4	ESI2	PASGW-002	Purge Water	1994	
136 D	2	5	ESI2	ACDGW-002	Decon Water	03/28/95	
128 D	2	6	ESI3	T21GW-001	Soil Cuttings	03/23/95	
116 D	2	7	ESI2	PASGW-002	Purge Water	03/12/95	
112 D	2	8	ESI2	PASGW-001	Purge Water	03/12/95	Leaker - Empty Drum
16 E	3	1	ESI9	Baker Tank	Decon Water	03/24/95	
14 E	3	2	ESI9	Baker Tank	Decon Water	03/24/95	
11 E	3	3	ESI9	Baker Tank	Decon Water	03/24/95	
12 E	3	4	ESI9	Baker Tank	Decon Water	03/24/95	Leaker
23 E	3	5	ESI9	Baker Tank	Decon Water	03/24/95	
20 E	3	7	ESI9	Baker Tank	Decon Water	03/24/95	
17 E	3	8	ESI9	Baker Tank	Decon Water	03/24/95	
18 E	4	1	ESI9	Baker Tank	Decon Solids/Water	03/26/95	
2 E	4	2	ESI9	Baker Tank	Decon Water	03/24/95	
13 E	4	3	ESI9	Baker Tank	Decon Water	03/24/95	
15 E	4	4	ESI9	Baker Tank	Decon Water	03/24/95	
24 E	4	5	ESI9	Baker Tank	Decon Water	03/24/95	
8 E	4	6	ESI9	Baker Tank	Decon Water	03/24/95	
19 E	4	7	ESI9	Baker Tank	Decon Water	03/24/95	
2 E	4	8	ESI9	Baker Tank	Decon Water	03/24/95	
11 G	5	3	OU3	YWRGW-002D	Soil Cuttings	06/08/95	
2 U	5	5	AOC3	PPLGW-013D	Soil Cuttings	06/24/95	
4 Z	5	6	OU2	RWRGW-003D	Soil Cuttings	08/26/95	
6 Z	5	7	OU2	RWRGW-003D	Soil Cuttings	08/26/95	
10 K	5	8	AOC3	PPLGW-012D	Soil Cuttings	06/20/95	
1 I	5	9	OU3	SAAGW-001D	Soil Cuttings	06/10/95	
7 Z	5	10	OU2	RWRGW-003D	Soil Cuttings	08/26/95	
8 K	5	11	AOC3	PPLGW-012D	Soil Cuttings	06/20/95	
13 G	6	1	OU3	YWRGW-002D	Soil Cuttings	06/08/95	
6 G	6	2	OU3	YWRGW-002D	Soil Cuttings	06/06/95	
1 G	6	3	OU3	YWRGW-002D	Soil Cuttings	06/06/95	
10 G	6	4	OU3	YWRGW-002D	Soil Cuttings	06/07/95	
5 G	6	5	OU3	YWRGW-002D	Soil Cuttings	06/06/95	
1 AA	6	6	OU2	RWRGW-003	Soil Cuttings	08/27/95	
5 Z	6	7	OU2	RWRGW-003D	Soil Cuttings	08/26/95	
11 K	6	8	AOC3	PPLGW-012D	Soil Cuttings	06/23/95	
2 I	6	9	OU3	SAAGW-001D	Soil Cuttings	06/10/95	
1 Y	6	10	OU2	RWRGW-002	Soil Cuttings	08/25/95	
1 Z	6	11	OU2	RWRGW-003D	Soil Cuttings	08/26/95	
104 B	7	1	ESI1	MZAGW-002	Purge Water	03/08/95	Leaker
3 I	7	2	OU3	SAAGW-001D	Soil Cuttings	06/10/95	

**IDW Inventory by Position
West Virginia Ordnance Works**

10/06/1998

Drum ID	Row	Positio	Site	Location	Description	Date	Remarks
7 G	7	3	OU3	YWRGW-002D	Soil Cuttings	06/07/95	
7 K	7	4	AOC3	PPLGW-012D	Soil Cuttings	06/20/95	
3 U	7	5	AOC3	PPLGW-013D	Soil Cuttings	06/24/95	
8 O	7	6	AOC3	PPLGW-008D	Waste Grout	06/21/95	
6 I	7	7	OU3	SAAGW-001D	Soil Cuttings	06/09/95	
8 U	7	8	AOC3	PPLGW-013D	Soil Cuttings	06/25/95	
4 I	7	9	OU3	SAAGW-001D	Soil Cuttings	06/09/95	
123 D	8	1	ESI1	YWLGW-025	Purge Water	03/07/94	Leaker - Empty Drum
4 G	8	2	OU3	YWRGW-002D	Soil Cuttings	06/06/95	
2 Z	8	3	OU2	RWRGW-003D	Soil Cuttings	08/26/95	
1 V	8	4	OU2	RWRGW-002D	Soil Cuttings	07/05/95	
9 K	8	5	AOC3	PPLGW-012D	Soil Cuttings	06/20/95	
3 Z	8	6	OU2	RWRGW-003D	Soil Cuttings	08/26/95	
3 G	8	7	OU3	YWRGW-002D	Soil Cuttings	06/06/95	
3 K	8	8	AOC3	PPLGW-012D	Soil Cuttings	06/19/95	
5 I	8	9	OU3	SAAGW-001D	Soil Cuttings	06/09/95	
1 M	9	1	AOC3	PPLGW-009D	Soil Cuttings	06/23/95	
1 X	9	2	OU2	RWRGW-004	Soil Cuttings	07/07/95	
Unk	1	9	3		Water		Leaker - Closed Head
5 M	9	4	AOC3	PPLGW-009D	Soil Cuttings	06/23/95	
11 U	9	5	AOC3	PPLGW-013D	Soil Cuttings	06/26/95	
8 I	9	6	OU3	SAAGW-001D	Soil Cuttings	06/20/95	
2 S	9	7	AOC3	PPLGW-011D	Soil Cuttings	06/21/95	
9 U	9	8	AOC3	PPLGW-013D	Soil Cuttings	06/25/95	
1 R	9	9	AOC3	PPLGW-011	Soil Cuttings	06/19/95	
2 M	9	10	AOC3	PPLGW-009D	Soil Cuttings	06/23/95	
7 M	10	1	AOC3	PPLGW-009D	Soil Cuttings	06/23/95	
Unk	2	10	2		Water		Leaker - Closed Head
1 W	10	3	OU2	RWRGW-004D	Soil Cuttings	07/06/95	
10 S	10	4	AOC3	PPLGW-011D	Soil Cuttings	06/21/95	
10 M	10	5	AOC3	PPLGW-009D	Soil Cuttings	06/26/95	
4 S	10	6	AOC3	PPLGW-011D	Soil Cuttings	06/21/95	
10 U	10	7	AOC3	PPLGW-013D	Soil Cuttings	06/25/95	
8 M	10	8	AOC3	PPLGW-009D	Soil Cuttings	06/23/95	
9 M	10	9	AOC3	PPLGW-009D	Soil Cuttings	06/23/95	
6 M	10	10	AOC3	PPLGW-009D	Soil Cuttings	06/23/95	
6 S	11	1	AOC3	PPLGW-011D	Soil Cuttings	06/22/95	
8 S	11	2	AOC3	PPLGW-011D	Soil Cuttings	06/22/95	
5 S	11	3	AOC3	PPLGW-011D	Soil Cuttings	06/22/95	
6 U	11	4	AOC3	PPLGW-013D	Soil Cuttings	06/24/95	
7 U	11	5	AOC3	PPLGW-013D	Soil Cuttings	06/25/95	
4 M	11	6	AOC3	PPLGW-009D	Soil Cuttings	06/23/95	
2 K	11	7	AOC3	PPLGW-012D	Soil Cuttings	06/19/95	
1 K	11	8	AOC3	PPLGW-012D	Soil Cuttings	06/19/95	
4 U	11	9	AOC3	PPLGW-013D	Soil Cuttings	06/25/95	
1 S	11	10	AOC3	PPLGW-011D	Soil Cuttings	06/21/95	
6 K	12	1	AOC3	PPLGW-012D	Soil Cuttings	06/19/95	
5 K	12	2	AOC3	PPLGW-012D	Soil Cuttings	06/19/95	
7 S	12	3	AOC3	PPLGW-011D	Soil Cuttings	06/22/95	
1 T	12	4	AOC3	PPLGW-013	Soil Cuttings	06/22/95	

**IDW Inventory by Position
West Virginia Ordnance Works**

10/06/1998

Drum ID	Row	Positio	Site	Location	Description	Date	Remarks
3 M	12	5	AOC3	PPLGW-009D	Soil Cuttings	06/23/95	
9 S	12	6	AOC3	PPLGW-011D	Soil Cuttings	06/22/95	
3 S	12	7	AOC3	PPLGW-011D	Soil Cuttings	06/21/95	
1 V	12	8	OU2	RWRGW-002D	Soil Cuttings	07/05/95	
4 K	12	9	AOC3	PPLGW-012D	Soil Cuttings	06/19/95	
5 U	12	10	AOC3	PPLGW-013D	Soil Cuttings	06/25/95	
2 U	13	1	AOC3	PPLGW-013D	Soil Cuttings	06/24/95	
12 BE	13	2	ESI9	NAAGW-001D	Soil Cuttings	01/23/96	
2 BG	13	3	ESI9	PPLGW-014	Soil Cuttings	12/14/95	
15 BE	13	4	ESI9	AAGW-001/-001	Decon Pad Water	12/20/95	Leaker - Empty
4 BA	13	5	ESI9	MCYGW-002D	Drilling Mud	12/13/95	
2 BD	13	6	ESI9	NAAGW-001	Soil Cuttings	12/17/95	
2 BA	13	7	ESI9	MCYGW-002D	Drilling Mud	12/13/95	
2 BC	13	8	ESI9	MCYGW-001	Soil Cuttings	12/13/95	
14 G	13	9	OU3	YWRGW-002D	Soil Cuttings	1995	
Unk	3	14	1		Soils		Empty?
Unk	4	14	2		Soils		Empty?
1 BG	14	3	ESI9	PPLGW-014	Soil Cuttings	12/14/95	
14 BE	14	4	ESI9	NAAGW-001D	Soil Cuttings	01/23/96	
1 BB	14	5	ESI9	MCYGW-002	Soil Cuttings	12/13/95	
5 BA	14	6	ESI9	MCYGW-002D	Drilling Mud	12/13/95	
9 BA	14	7	ESI9	MCYGW-002D	Soil Cuttings	12/13/95	
8 BA	14	8	ESI9	MCYGW-002D	Soil Cuttings	12/13/95	
3 BA	14	9	ESI9	MCYGW-002D	Drilling Mud	12/13/95	
4 BE	15	1	ESI9	NAAGW-001D	Soil Cuttings	12/17/95	
5 BE	15	2	ESI9	NAAGW-001D	Soil Cuttings	12/17/95	
1 BC	15	3	ESI9	MCYGW-001	Soil Cuttings	12/13/95	
10 BA	15	4	ESI9	MCYGW-002D	Soil Cuttings	12/13/95	
Unk	5	15	5		Water		Leaker - Closed Head
12 I	15	6	OU3	SAAGW-001D	Drilling Water	1995	Leaker - Closed Head
6 BA	15	7	ESI9	MCYGW-002D	Soil Cuttings	12/13/95	
10 BE	15	8	ESI9	NAAGW-001D	Drilling Mud	01/20/96	
11 BE	15	9	ESI9	NAAGW-001D	Drilling Mud	01/20/96	
9 BD	16	1	ESI9	NAAGW-001D	Soil Cuttings	12/11/95	
3 BE	16	2	ESI9	NAAGW-001D	Soil Cuttings	12/16/95	
7 BA	16	3	ESI9	MCYGW-002D	Soil Cuttings	12/13/95	
Unk	6	16	4		Soils		-
11 I	16	5	OU3	SAAGW-001D	Drilling Water	1995	Possible Leaker
Unk	7	16	6		Water		Possible Leaker
3 BB	16	7	ESI9	MCYGW-002	Soil Cuttings	12/13/95	
13 BE	16	8	ESI9	NAAGW-001D	Drilling Mud	01/23/96	
6 BE	16	9	ESI9	NAAGW-001D	Soil Cuttings	12/17/95	
8 BE	17	1	ESI9	NAAGW-001D	Drilling Mud	01/20/96	
7 BE	17	2	ESI9	NAAGW-001D	Soil Cuttings	12/17/95	
4 BD	17	3	ESI9	NAAGW-001D	Soil Cuttings	12/11/95	
3 BD	17	4	ESI9	NAAGW-001D	Soil Cuttings	12/11/95	
1 BD	17	5	ESI9	NAAGW-001D	Soil Cuttings	12/09/95	
3 BE	17	6	ESI9	NAAGW-001D	Soil Cuttings	12/17/95	
7 BD	17	7	ESI9	NAAGW-001D	Drilling Mud	12/14/95	
3 BG	17	8	ESI9	PPLGW-014	Drilling Mud	01/27/96	

**IDW Inventory by Position
West Virginia Ordnance Works**

10/06/1998

Drum ID	Row	Positio	Site	Location	Description	Date	Remarks
16 BE	18	2	ESI9	NAAGW-001D	Soil Cuttings	01/24/96	
5 BD	18	3	ESI9	NAAGW-001D	Soil Cuttings	12/16/95	
9 I	18	4	OU3	NAAGW-001	Soil Cuttings	12/15/95	
2 BE	18	5	ESI9	NAAGW-001D	Soil Cuttings	12/16/95	
1 BE	18	6	ESI9	NAAGW-001D	Soil Cuttings	12/12/95	
2 BB	18	7	ESI9	MCYGW-002	Soil Cuttings	12/13/95	
2 BG	18	8	ESI9	PPLGW-014	Soil Cuttings	12/14/95	
1 BG	19	1	ESI9	PPLGW-014	Soil Cuttings	12/14/95	
1 BF	19	2	ESI9	SELGW-005	Soil Cuttings	12/13/95	
Unk	8	19	3		Water		Possible Leaker
1 BC	19	4	ESI9	MCYGW-001	Soil Cuttings	12/13/95	
Unk	9	19	5		Water		Possible Leaker
Unk	10	19	6		Water		Possible Leaker
16 G	19	7	OU3	YWRGW-002D	Drilling Water	1995	Leaker - Empty Drum
3 V	20	1	OU2		Soils	Jul-95	
2 V	20	2	OU2		Water	Jul-95	
1 I	20	3	OU3	SAAGW-001D	Soil Cuttings	06/10/95	
1 BA	20	4	ESI9	MCYGW-002D	Drilling Mud	12/13/95	
Unk	11	20	5		Water		Leaker - Empty Drum
Unk	23	20	6		Soils		
15 G	20	7	OU3	YWRGW-002D	Drilling Water	1995	
12 G	20	8	OU3	YWRGW-002D	Soil Cuttings	06/08/95	
18 G	21	1	OU3	YWRGW-002D	Soil Cuttings	06/11/95	
2 G	21	2	OU3	YWRGW-002D	Soil Cuttings	06/06/95	
1 H	21	3	OU3	YWRGW-002	Soil Cuttings	06/09/95	
17 G	22	1	OU3	YWRGW-002D	Soil Cuttings	06/11/95	
8 G	22	2	OU3	YWRGW-002D	Soil Cuttings	06/07/95	
7 O	22	3	AOC3	PPLGW-008D	Soil Cuttings	06/19/95	
9 G	22	4	OU3	YWRGW-002D	Soil Cuttings	06/07/95	
40 D	23	1	OU1	TNTGW-014	Purge Water	11/13/94	
52 D	23	2	OU1	TNTLW-006	Purge Water	11/16/94	
None		23	SLTMP	PPLGW-012D	Purge Water	04/18/97	
12 ZZ	24	1	OU3	YWRMW-001A	Decon water	06/12/96	
224 A	24	2	OU1/OU9		Decon Water	1993	
None		24	SLTMP	PPLGW-012D	Purge Water	04/18/97	
8 ZZ	25	1	OU3	YWRMW-001A	Development Water	06/12/96	
5 ZZ	25	2	OU3	YWRMW-001A	Development Water	06/12/96	
11 ZZ	25	3	OU3	YWRMW-001A	Development Water	06/12/96	
6 ZZ	26	1	OU3	YWRMW-001A	Development Water	06/12/96	
1 Z	26	2	OU2	RWRGW-03D	Soil Cuttings	08/26/95	
9 ZZ	26	3	OU3	YWRMW-001A	Development Water	06/12/96	
NGD		27	ESI2	PASGW-007	Purge Water		Possible Leaker
NGD		27	ESI2	PASGW-007	Purge Water		
NGD		27	ESI2	PASGW-007	Purge Water		Possible Leaker
113 D	27	4	ESI2	PASGW-001	Soil Cuttings	02/28/95	
4 ZZ	27	5	OU3	YWRMW-001A	Soil Cuttings	06/09/96	
12 ZZ	27	6	OU3	YWRMW-001A	Decon water	06/12/96	
2 Z	27	7	OU2	RWRGW-03D	Soil Cuttings	08/26/95	
13 ZZ	27	8	OU3	YWRMW-001A	Decon Pad	06/12/96	
NGD		28	ESI2	PASGW-007	Purge Water	03/09/95	Possible Leaker

**IDW Inventory by Position
West Virginia Ordnance Works**

10/06/1998

Drum ID	Row	Positio	Site	Location	Description	Date	Remarks
NGD		28	2	ESI2	PASGW-007	Purge Water	03/12/95
NGD		28	3	ESI2	PASGW-007	Purge Water	03/09/95
NGD		28	4	ESI2	PASGW-007	Purge Water	
116 D		28	5	ESI2	PASGW-001	Purge Water	02/28/95 Leaker - Empty Drum
7 ZZ		28	6	OU3	YWRMW-001A	Development Water	06/12/96
3 ZZ		28	7	OU3	YWRMW-001A	Soil Cuttings	06/08/96
10 ZZ		28	8	OU3	YWRMW-001A	Development Water	06/12/96
546 A		29	1	OU11		Purge Water	02/94
154 A		29	2	OU1	PPLLW-003D	Waste Grout	10/11/93
15 A		29	3	OU8		Lab Waste	11/12/93
158 A		29	4	OU1	RMFLW-001	Waste Grout	11/02/93
152 A		29	5	OU1/OU9	Alliance	Diesel Fuel	10/93
47 A		29	6	OU1		Soil Cuttings	1993
179 A		30	1	OU1	TNTLW-006D	Soil Cuttings	10/18/93
441 A		30	2	OU8		Lab Waste	11/16/93
75 A		30	3	OU9		Soil Cuttings & Water	1993 Rotasonic Spoils
171 A		30	4	OU1/OU9		PPE	10/25/93
45 A		30	5	OU1	TNTLW-005D	Soil Cuttings	10/11/93
Unk	12	30	6			Soils	
221 A		31	1	OU8		Lab Waste	10/93
297 A		31	2	OU1	PPLLW-003D	Purge Water	10/93
280 A		31	3	OU1	RWLLW-004D	Soil Cuttings	10/93
111 A		31	4	OU1/OU9		Waste Antifreeze	02/94
464 A		31	5	OU11	SELGW-003	Purge Water	02/25/94
459 A		31	6	OU9	YWLGW-025D	Purge Water	09/29/93
302 A		32	1	OU1	YWLGW-025D	Purge Water	10/18/93
84 A		32	2	OU1		Soil Cuttings	1993
465 A		32	3	OU11	SELGW-003	Purge Water	02/25/94
432 A		32	4	OU1/OU9		Plastic Waste	11/26/93
474 A		32	5	OU11	SELGW-004D	Purge Water	02/24/94 Possible Leaker
548 A		32	6	OU8		Lab Waste	02/25/94
9 A		33	1	OU11	SELGW-002	Purge Water	3/94 Leaker - Empty Drum
78 A		33	2	OU1	RMFLW-001	Soil Cuttings	11/01/93 Emptied 7/27/96
26 A		34	1	OU1/OU9		Lab Waste (Filters)	12/17/93
Unk	13	35	1			Soils	
Unk	14	35	2			Water	
Unk	15	35	3			Empty	
Unk	16	35	4			Empty	
545 A		35	5	OU11		Purge Water	02/94 Leaker - Empty Drum
Unk	17	36	2			Water	
10 I		36	3	OU3	SAAGW-001D	Drilling Water	1995
Unk	18	36	4			Water	Possible Leaker
Unk	19	36	5			Water	Possible Leaker
None		37	1	OU1		Waste Kerosene (10 G)	
103 B		37	3	ESI1	MZAGW-002	Development Water	03/08/95 Leaker - Empty Drum
104 B		38	1	ESI1	MZAGW-002	Development Water	03/08/95
92 D		38	2	OU10		Decon Water	01/19/95
91 D		38	3	OU10		Decon Water	01/19/95
Unk	20	39	2			Water	
37 B		39	3	OU5	Site Wide	Decon Water	02/07/95

**IDW Inventory by Position
West Virginia Ordnance Works**

10/06/1998

Drum ID	Row	Positio	Site	Location	Description	Date	Remarks
30 B	40	2	OU5	Site Wide	PPE	01/17/95	
38 B	40	3	OU5	Site Wide	Decon Water	02/07/95	Possible Leaker
1 W	41	2	AOCs	Site Wide	Decon Water	04/02/97	
2 W	41	3	AOCs	Site Wide	Decon Water	04/01/97	
101 B	42	1	ESI1	MZAGW-001	Development Water	03/01/95	
31 B	42	2	OU5	Site Wide	PPE	01/17/95	
15 B	43	1	OU6	W21GW-003	Decon Plastic & Water	1994	
Unk	21	43	2		Water		Possible Leaker
82 B	44	1	OU12	SPHGW-001D	Soil Cuttings	02/26/95	
102 B	44	2	ESI1	MZAGW-001	Development Water	03/01/95	
84 B	45	1	OU12	SPHGW-001D	Soil Cuttings	02/28/95	
116 B	46	1	OU12	SPHGW-001	Decon Pad	03/07/95	
131 D	47	1	OU12	SPHGW-001	Purge Water	03/24/95	
29 D	47	2	OU1	RWLGW-026	Purge Water	11/09/94	
33 D	47	3	OU1	PPLLW-003D	Purge Water	11/10/94	
39 D	47	4	OU1	PPLLF-005	Purge Water	11/13/94	
30 D	47	5	OU1	PPLLF-003	Purge Water	11/10/94	
120 D	47	6	ESI1	RWLGW-026	Purge Water	03/95	
42 D	48	2	OU1	P13GW-023I	Purge Water	11/15/94	
43 D	48	3	OU1	P13GW-023I	Purge Water	11/15/94	
37 D	48	4	ESI4	RWLTR-001	Pieces of Clay Pipe	11/94	
31 D	48	5	OU1	PPLLW-003D	Purge Water	11/10/94	
119 D	48	6	ESI1	MZAGW-002	Purge Water	03/22/95	
62 D	49	2	OU1/OU6		Lab Waste	10/30/94	
125 D	49	3	ESI1	MZAGW-003	Decon Spoils	03/15/95	
108 D	49	4	ESI1	MZAGW-002	Soil Cuttings	02/26/95	
110 D	49	5	ESI1		Decon Water	02/27/95	
33 D	50	1	OU1	PPLLW-003D	Purge Water	11/10/94	
104 D	50	2	ESI1		Lab Waste	02/28/95	
Unk	24	50	3		Soils		
117 D	50	4	OU12	NPHGW-001	Purge Water	03/21/95	Leaker - Empty Drum
111 D	50	5	ESI1		Plastic Waste	02/27/95	
109 D	50	6	ESI1		Decon Water	02/27/95	
106 D	51	2	ESI1	MZAGW-001	Soil Cuttings	02/26/95	
31 D	51	4	OU1	PPLLW-003D	Purge Water	11/10/94	
28 D	51	5	OU1	YWLGW-025	Purge Water	11/08/94	
26 D	51	6	OU1	TNTGW-036D	Purge Water	11/07/94	Leaker - Empty Drum
118 D	51	7	ESI1	MZAGW-001	Purge Water	03/22/95	Possible Leaker
36 D	52	1	OU6	P07GW-002	Purge Water	11/12/94	Leaker - Empty Drum
107 D	52	2	ESI1	MZAGW-001	Soil Cuttings	02/26/95	Crushed Drum
30 D	52	3	OU1	PPLLF-003	Purge Water	11/10/94	
27 D	52	4	OU1	TNTGW-036D	Purge Water	11/07/94	
24 D	52	5	OU1	TNTGW-016	Purge Water	11/07/94	
25 D	52	6	OU1	TNTGW-036D	Purge Water	11/07/94	
19 D	52	7	OU1	BGELW-002	Purge Water	10/31/94	
58 D	53	2	OU1	TNTGW-005	Purge Water	11/17/94	
16 D	53	3	OU1	TNTGW-010	Purge Water	10/31/94	
14 D	54	2	OU1	TNTGW-010D	Purge Water	10/30/94	
117 D	54	3	OU12	NPHGW-002	Purge Water	03/21/95	
17 D	55	1	OU1	BGELW-002	Purge Water	10/31/94	

**IDW Inventory by Position
West Virginia Ordnance Works**

10/06/1998

Drum ID	Row	Positio	Site	Location	Description	Date	Remarks
44 D	55	2	OU1	RWLLW-004D	Purge Water	11/15/94	
49 D	55	3	OU1	TNTLW-005D	Purge Water	11/16/94	
50 D	55	4	OU1	TNTLW-005D	Purge Water	11/16/94	
45 D	56	1	OU1	RWLLW-004D	Purge Water	11/15/94	
10 D	56	2	OU1	BGEGW-007	Purge Water	10/30/94	Leaker - Empty Drum
12 D	56	3	OU1	TNTGW-010D	Purge Water	10/30/94	
18 D	56	4	OU1	TNTGW-015	Purge Water	11/01/94	
47 D	57	1	OU1	TNTLW-005D	Purge Water	11/15/94	
48 D	57	2	OU1	TNTLW-005D	Purge Water	11/16/94	
9 D	57	3	OU1	BGEGW-006	Purge Water	10/29/94	
54 D	57	4	OU1	TNTLW-006D	Purge Water	11/17/94	
5 D	57	5	OU1	BGWGW-003	Purge Water	10/28/94	
13 D	57	6	OU1	TNTGW-010D	Purge Water	10/30/94	Leaker - Empty Drum
11 D	58	1	OU1	BGEGW-007	Purge Water	10/30/1995	
55 D	58	2	OU1	TNTLW-006D	Purge Water	11/17/94	
4 D	58	3	OU1	BGWGW-003	Purge Water	10/28/94	
56 D	58	4	OU1	TNTLW-006D	Purge Water	11/17/94	
57 D	58	5	OU1	TNTGW-005	Purge Water	11/17/94	
59 D	58	6	OU1	TNTGW-005	Purge Water	11/17/94	
1 D	59	1	OU1	BGWGW-001	Purge Water	10/28/94	
3 D	59	2	OU1	BGWGW-001	Purge Water	10/28/94	Possible Leaker
Unk	22	59	3		Water		
36 D	59	4	OU6	P07GW-002	Purge Water	11/12/94	Leaker
41 D	60	1	OU1	PPLLF-006	Purge Water	11/13/94	
2 D	60	2	OU1	BGWGW-001	Purge Water	10/28/94	Leaker - Empty Drum
Unk	25	61	1		Water		Leaker
Unk	26	61	2		Water		
None		61	3	ESI2	ACDGW-001	02/10/95	
35 D	61	4	OU6	P23GW-004	Purge Water	11/11/94	
10 D	61	5	ESI4	RWLTR-001	Lab Waste	11/15/94	
440 A	38A	1	OU8		Lab Waste	12/17/93	
433 A	38A	2	OU8		Lab Waste - Glass	10/93	
447 A	38B	1	OU8		Lab Waste	11/12/93	
446 A	38B	2	OU8		Lab Waste - TNT Screen	11/17/93	
8 10KB	BT1	1	ESI9	Site Wide	Purge Water	1995	
7 10KB	BT1	2	ESI9	Site Wide	Purge Water	1995	
6 10KB	BT1	3	ESI9	Site Wide	Purge Water	1995	
5 10KB	BT1	4	ESI9	Site Wide	Purge Water	1995	
4 10KB	BT1	5	ESI9	Site Wide	Purge Water	1995	
3 10KB	BT1	6	ESI9	Site Wide	Purge Water	1995	
2 10KB	BT1	7	ESI9	Site Wide	Purge Water	1995	
1 10KB	BT1	8	ESI9	Site Wide	Purge Water	1995	
15 10KB	BT2	1	ESI9	Site Wide	Purge Water	1995	
14 10KB	BT2	2	ESI9	Site Wide	Purge Water	1995	
13 10KB	BT2	3	ESI9	Site Wide	Purge Water	1995	
12 10KB	BT2	4	ESI9	Site Wide	Purge Water	1995	
11 10KB	BT2	5	ESI9	Site Wide	Purge Water	1995	
10 10KB	BT2	6	ESI9	Site Wide	Purge Water	1995	
9 10KB	BT2	7	ESI9	Site Wide	Purge Water	1995	
24 10KB	BT3	1	ESI9	Site Wide	Purge Water	1995	

**IDW Inventory by Position
West Virginia Ordnance Works**

10/06/1998

Drum ID	Row	Positio	Site	Location	Description	Date	Remarks
23	10KB	BT3	2	ESI9	Site Wide	Purge Water	1995
22	10KB	BT3	3	ESI9	Site Wide	Purge Water	1995
21	10KB	BT3	4	ESI9	Site Wide	Purge Water	1995
20	10KB	BT3	5	ESI9	Site Wide	Purge Water	1995
19	10KB	BT3	6	ESI9	Site Wide	Purge Water	1995
18	10KB	BT3	7	ESI9	Site Wide	Purge Water	1995
17	10KB	BT3	8	ESI9	Site Wide	Purge Water	1995
16	10KB	BT3	9	ESI9	Site Wide	Purge Water	1995
32	10KB	BT4	2	ESI9	Site Wide	Purge Water	1995
31	10KB	BT4	3	ESI9	Site Wide	Purge Water	1995
30	10KB	BT4	4	ESI9	Site Wide	Purge Water	1995
29	10KB	BT4	5	ESI9	Site Wide	Purge Water	1995
28	10KB	BT4	6	ESI9	Site Wide	Purge Water	1995
27	10KB	BT4	7	ESI9	Site Wide	Purge Water	1995
26	10KB	BT4	8	ESI9	Site Wide	Purge Water	1995
25	10KB	BT4	9	ESI9	Site Wide	Purge Water	1995
39	10KB	BT5	2	ESI9	Site Wide	Purge Water	1995
38	10KB	BT5	3	ESI9	Site Wide	Purge Water	1995
37	10KB	BT5	4	ESI9	Site Wide	Purge Water	1995
36	10KB	BT5	5	ESI9	Site Wide	Purge Water	1995
35	10KB	BT5	6	ESI9	Site Wide	Purge Water	1995
34	10KB	BT5	7	ESI9	Site Wide	Purge Water	1995
33	10KB	BT5	8	ESI9	Site Wide	Purge Water	1995
46	10KB	BT6	2	ESI9	Site Wide	Purge Water	1995
45	10KB	BT6	3	ESI9	Site Wide	Purge Water	1995
44	10KB	BT6	4	ESI9	Site Wide	Purge Water	1995
43	10KB	BT6	5	ESI9	Site Wide	Purge Water	1995
42	10KB	BT6	6	ESI9	Site Wide	Purge Water	1995
41	10KB	BT6	7	ESI9	Site Wide	Purge Water	1995
40	10KB	BT6	8	ESI9	Site Wide	Purge Water	1995
37	B	OP		ESI2	ACDGW-001	Soil Cuttings	02/10/95
38	B	OP		ESI2	ACDGW-001	Soil Cuttings	02/10/95
39	B	OP		ESI2	ACDGW-001	Soil Cuttings	02/10/95
40	B	OP		ESI2	ACDGW-001	Soil Cuttings	02/10/95
41	B	OP		ESI2	ACDGW-001	Soil Cuttings	02/10/95
42	B	OP		ESI2	ACDGW-001	Soil Cuttings	02/10/95
43	B	OP		ESI2	ACDGW-001	Soil Cuttings	02/10/95
Unk		OP				Water	Leaker
1		Q	1	LTMP	NPHGW-002	Purge Water	12/15/97
2		Q	2	LTMP	YWRGW-027D	Purge Water	12/15/97
3		Q	3	LTMP	YWRGW-027D	Purge Water	12/15/97
4		Q	4	LTMP	NPHGW-002	Purge Water	12/15/97
5		Q	5	LTMP	YWRGW-027D	Purge Water	12/15/97
6		Q	6	LTMP	YWRGW-027D	Purge Water	12/15/97
7		Q	7	LTMP	YWRPT-001	Purge Water	12/15/97
8		Q	8	LTMP	YWRPT-001	Purge Water	12/15/97
9		Q	9	LTMP	YWRPT-001	Purge Water	12/15/97
10		Q	10	LTMP	YWRPT-001	Purge Water	12/15/97
11		Q	11	LTMP	YWRPT-001	Purge Water	12/15/97
12		Q	12	LTMP	RWRGW-003	Purge Water	12/15/97

**IDW Inventory by Position
West Virginia Ordnance Works**

10/06/1998

Drum ID	Row	Positio	Site	Location	Description	Date	Remarks
13	Q	13	LTMP	YWRPT-001	Purge Water	12/15/97	
14	Q	14	LTMP	YWRPT-001	Purge Water	12/15/97	
15	Q	15	LTMP	RWLLW-004D	Purge Water	12/15/97	
16	Q	16	LTMP	RWLLW-004D	Purge Water	12/15/97	
17	Q	17	LTMP	RWLLW-004D	Purge Water	12/15/97	
18	Q	18	LTMP	RWLGW-026	Purge Water	12/15/97	
19	Q	19	LTMP	P13GW-023I	Purge Water	12/15/97	
20	Q	20	LTMP	RWLLW-004D	Purge Water	12/15/97	
21	Q	21	LTMP	PPLLF-003	Purge Water	12/15/97	
22	Q	22	LTMP	PPLLF-004	Purge Water	12/15/97	
23	Q	23	LTMP	YWLGW-025D	Purge Water	12/15/97	
24	Q	24	LTMP	PPLLF-004	Purge Water	12/15/97	
25	Q	25	LTMP	PPLLF-003	Purge Water	12/15/97	
26	Q	26	LTMP	RWRGW-045	Purge Water	12/15/97	
27	Q	27	LTMP	P13GW-023I	Purge Water	12/15/97	
28	Q	28	LTMP	RWLLW-004D	Purge Water	12/15/97	
29	Q	29	LTMP	TNTGW-014	Purge Water	12/15/97	
30	Q	30	LTMP	YWRPT-001	Purge Water	12/15/97	
31	Q	31	LTMP	YWLGW-025D	Purge Water	12/15/97	
32	Q	32	LTMP	YWRGW-027	Purge Water	12/15/97	
33	Q	33	LTMP	YWRGW-027	Purge Water	12/15/97	
34	Q	34	LTMP	YWRGW-002D	Purge Water	12/15/97	
35	Q	35	LTMP	TNTGW-014	Purge Water	12/15/97	
36	Q	36	LTMP	TNTGW-036D	Purge Water	12/15/97	
37	Q	37	LTMP	TNTGW-036D	Purge Water	12/15/97	
38	Q	38	LTMP	TNTGW-015	Purge Water	12/15/97	
39	Q	39	LTMP	TNTGW-036D	Purge Water	12/15/97	
40	Q	40	LTMP	RWRGW-002	Purge Water	12/15/97	
41	Q	41	LTMP	TNTGW-021	Purge Water	12/15/97	
42	Q	42	LTMP	TNTGW-036D	Purge Water	12/15/97	
43	Q	43	LTMP	YWRMW-001A	Purge Water	12/15/97	
44	Q	44	LTMP	YWRGW-002D	Purge Water	12/15/97	
45	Q	45	LTMP	TNTGW-017	Purge Water	12/15/97	
46	Q	46	LTMP	RWRGW-002	Purge Water	12/15/97	
47	Q	47	LTMP	TNTLW-006	Purge Water	12/15/97	
48	Q	48	LTMP	TNTLW-006	Purge Water	12/15/97	
49	Q	49	LTMP	RWRGW-046	Purge Water	12/15/97	
50	Q	50	LTMP	RWRGW-046	Purge Water	12/15/97	
51	Q	51	LTMP	RWRGW-031	Purge Water	12/15/97	
52	Q	52	LTMP	RWRPT-001	Purge Water	12/15/97	
53	Q	53	LTMP	RWRPT-001	Purge Water	12/15/97	
54	Q	54	LTMP	RWRGW-047	Purge Water	12/15/97	
55	Q	55	LTMP	RWRGW-047	Purge Water	12/15/97	
56	Q	56	LTMP	RWRGW-030	Purge Water	12/15/97	
57	Q	57	Data Gap	PWSGW-002A	Soil Cuttings	12/15/97	
58	Q	58	Data Gap	PWSGW-002A	Soil Cuttings	12/15/97	
59	Q	59	Data Gap	PWSGW-001	Soil Cuttings	12/15/97	
60	Q	60	Data Gap	PWSGW-001	Soil Cuttings	12/15/97	
61	Q	61	SLTMP	PWSGW-003	Soil Cuttings	12/15/97	
62	Q	62	SLTMP	PWSGW-003	Soil Cuttings	12/15/97	

**IDW Inventory by Position
West Virginia Ordnance Works**

10/06/1998

Drum ID	Row	Positio	Site	Location	Description	Date	Remarks
63	Q	63	SLTMP	PWSGW-003	Soil Cuttings	12/15/97	
64	Q	64	LTMP	BGDGW-006	Purge Water	12/15/97	
65	Q	65	LTMP	BGDGW-003	Purge Water	12/15/97	
66	Q	66	LTMP	BGDGW-006	Purge Water	12/15/97	
67	Q	67	LTMP	BGDGW-006	Purge Water	12/15/97	
68	Q	68	LTMP	BGDGW-004	Purge Water	12/15/97	
69	Q	69	LTMP	BGDGW-004	Purge Water	12/15/97	
70	Q	70	LTMP	BGDGW-005	Purge Water	12/15/97	
71	Q	71	LTMP	BGDGW-005	Purge Water	12/15/97	
72	Q	72	LTMP	BGDGW-007	Purge Water	12/15/97	
73	Q	73	LTMP	BGDGW-007	Purge Water	12/15/97	
74	Q	74	LTMP	BGDGW-008	Purge Water	12/15/97	
75	Q	75	LTMP	BGDGW-008	Purge Water	12/15/97	
76	Q	76	LTMP	PWSGW-002	Purge Water	12/15/97	
77	Q	77	LTMP	BGDGW-001	Purge Water	12/15/97	
78	Q	78	LTMP	PWSGW-002	Purge Water	12/15/97	
79	Q	79	LTMP	PWSGW-002	Purge Water	12/15/97	
80	Q	80	LTMP	PWSGW-002	Purge Water	12/15/97	
81	Q	81	LTMP	PWSGW-002	Purge Water	12/15/97	
82	Q	82	LTMP	PWSGW-003	Purge Water	12/15/97	
83	Q	83	LTMP	PWSGW-003	Purge Water	12/15/97	
84	Q	84	LTMP	PWSGW-002	Purge Water	12/15/97	
85	Q	85	LTMP	PWSGW-003	Purge Water	12/15/97	
86	Q	86	LTMP	PWSGW-003	Purge Water	12/15/97	
87	Q	87	LTMP	PWSGW-003	Purge Water	12/15/97	
88	Q	88	LTMP	PWSGW-001	Purge Water	12/15/97	
89	Q	89	LTMP	PWSGW-003	Purge Water	12/15/97	
90	Q	90	LTMP	PWSGW-003	Purge Water	12/15/97	
91	Q	91	LTMP	PWSGW-001	Purge Water	12/15/97	
92	Q	92	LTMP	PWSGW-001	Purge Water	12/15/97	
93	Q	93	LTMP	PWSGW-001	Purge Water	12/15/97	
94	Q	94	LTMP	PWSGW-001	Purge Water	12/15/97	
78 B	Q		OU12	NPHGW-002	Soil Cuttings		Emptied July 96
130 D	Q		OU12	NPH Trench	Decon Plastic	03/24/95	

ATTACHMENT 2

**PHOTOGRAPHS TAKEN DURING IDW INSPECTION
SEPTEMBER 21 – 24, 1998
WEST VIRGINIA ORDNANCE WORKS
MASON COUNTY, WEST VIRGINIA**



Photograph No. 1.
IDW Staging Area - Looking Northeast from Gate,
September 21, 1998.



Photograph No. 2.
IDW Staging Area - Looking Northeast from Gate,
September 21, 1998.



Photograph No. 3.
IDW Staging Area - Looking Southwest from Quonset
Hut, September 22, 1998.



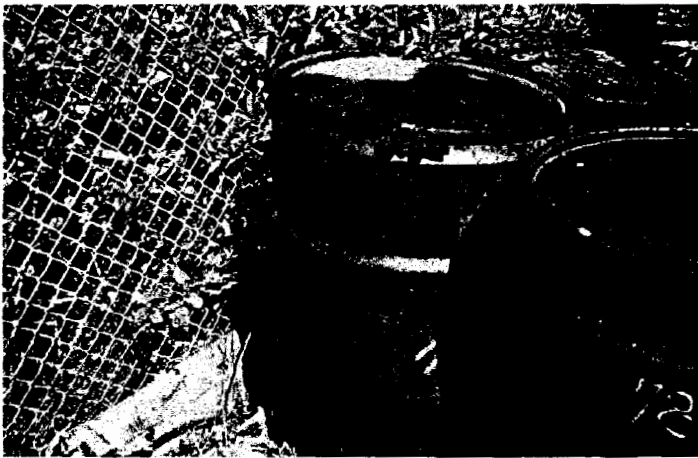
Photograph No. 4.
IDW Staging Area Behind Quonset Hut - Looking
East-Southeast, September 22, 1998.



Photograph No. 5.
Mowing of IDW Staging Area - Looking Northeast from
Gate Area, September 22, 1998.



Photograph No. 6.
Drum 107-D and Row No. 52 - Looking North,
September 22, 1998.



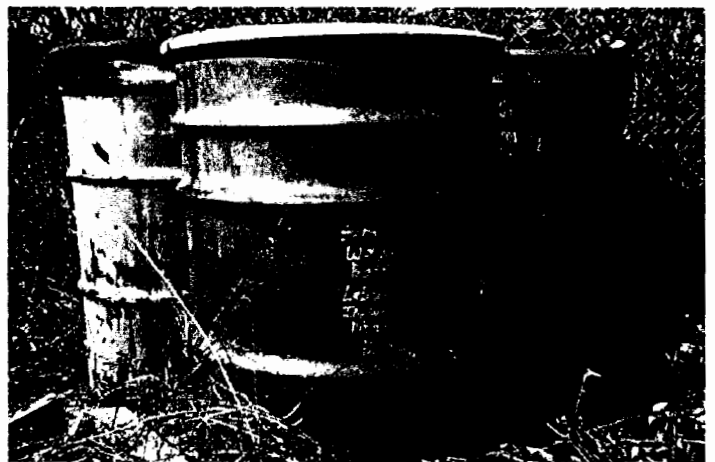
Photograph No. 7.
Drums 9-A and 78-A, Row No. 33 - Looking North,
September 22, 1998.



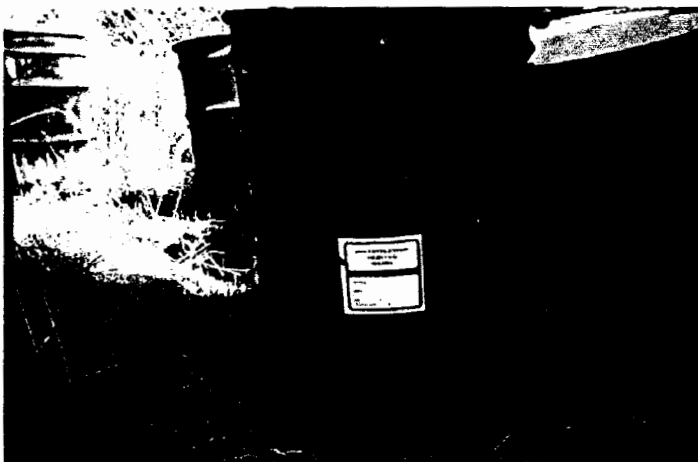
Photograph No. 8.
Drum 16-G and Row No. 19 - Looking North,
September 22, 1998.



Photograph No. 9.
Row No. 36 - Looking Southwest,
September 22, 1998.



Photograph No. 10.
Row No's 38B and 38A (Lab Waste) - Looking West,
September 22, 1998.



Photograph No. 11.
Drum 13-D and Row No. 56 - Looking North,
September 22, 1998.



Photograph No. 12.
Unidentified Drums, Pos. 1 & 2, Row 61 - Looking East,
September 22, 1998.



Photograph No. 13.
Southeastern Corner of IDW Staging Area,
September 24, 1998.



Photograph No. 14.
Rows 15 through 20 - Looking Northwest,
September 24, 1998.



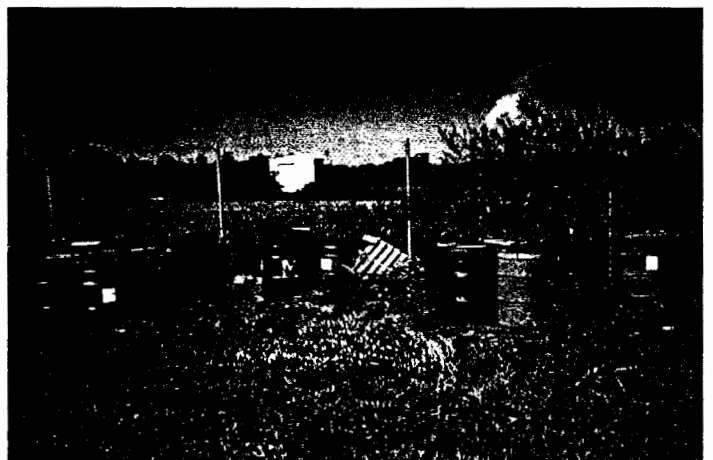
Photograph No. 15.
Rows 19 through 22 - Looking Northwest,
September 24, 1998.



Photograph No. 16.
Rows 23 through 28 - Looking Northwest,
September 24, 1998.



Photograph No. 17.
Rows 27 through 33 - Looking Northwest,
September 24, 1998.



Photograph No. 18.
Rows 31 through 37 - Looking Northwest,
September 24, 1998.



Photograph No. 19.
IDW Behind Quonset Hut - Looking Southeast,
September 24, 1998.



Photograph No. 20.
IDW Behind Quonset Hut - Looking East,
September 24, 1998.



Photograph No. 21.
Rows 38 through 46 - Looking East,
September 24, 1998.



Photograph No. 22.
Empty Drum of Unknown Origin
(Ammonium Perchlorate - UN 1442)
September 24, 1998

NOTE: This drum bears the following markings -

Manufacturer:

Kerr-McGee Chemical Corp.
1101 US Highway 93
Apex, NV 89124
702-643-4100

Shipping Data:

Thiokol Corporation
Elkton, MD 21921
PO No. 69544-BK
Item 01-200 Micron Flash Dried with TCP
SPEC: ESRM-17F, CLASS 1, PROCESS A &
MIL-A 192 B, INT. AMD. 1. GRADE C. CLASS 4
KMCC APEX LOT NO. 7306 (MFG 12/95)
052 OF 188 / 250-POUND DRUMS
(28 POUND TARE)



DEPARTMENT OF THE ARMY
HUNTINGTON DISTRICT, CORPS OF ENGINEERS
502 EIGHTH STREET
HUNTINGTON, WEST VIRGINIA 25701-2070

REPLY TO
ATTENTION OF:

2 OCT 1998

Engineering and Construction Division
Construction Management and
Field Support Branch

Mr. Thomas A. Fisher
West Virginia Division of Environmental Protection
Office of Waste Management
Compliance Assurance and Emergency Response
1356 Hansford Street
Charleston, West Virginia 25301-1401

Subject: West Virginia Ordnance Works, Notice of Violation,
EPA I.D. Number WVD980713036

Dear Mr. Fisher:

Reference is made to your letter of September 4, 1998 transmitting the Notice of Violation (NOV) and the Compliance Evaluation Inspection (CEI) Report for the subject project and your letter of September 30, 1998 providing comments to the Investigation Derived Waste Plan. Reference is also made to the attached document prepared by the Corps' contractor, International Technology (IT) Corporation.

In response to the NOV, general housekeeping has been performed at the site, such as mowing of the grass and returning overturned drums to their upright position on pallets. The drums have also been inventoried and documentation of drum conditions were noted as you will observe in the enclosed documentation. Drum labels have not been replaced at this time, however, all drums do contain a number which corresponds to the inventory list and location map as contained in the enclosure. Weekly inspections have been initiated and will continue as long as the drums are on site.

As outlined in the attached document, the removal of the investigation derived waste (IDW) is in accordance with your comments provided by your letter of September 30, 1998 with one exception. We have previously concluded after consultation with WVDEP, that the decontamination water on site was classified as a non-hazardous waste, rather than an F-Listed, Hazardous Waste. Methanol was used in the decontamination process at WVOW, however, it was used in very small quantities in combination with much larger quantities of water.

Additionally, as described in the IDW plan, (Paragraph 4.3.2.2 and Table 4-1), the decontamination fluids containing the methanol were placed in stainless steel bowls for on-site evaporation prior to addition to the drums. Thus, the resulting waste stream from the decontamination process is predominately water, which does not exhibit the characteristic of ignitability and should not be classified as an F003 waste. Because the decontamination water does not exhibit the characteristic of ignitability, we propose the decontamination water be added to and managed in the same manner as the purge and development water.

During the week of October 26, 1998 composite sampling will be performed at the site which is in accordance with your letter approving the consolidation and disposal of drums. In addition, disposal plans for "lab wastes" will be finalized at that time. All IDW should be removed from the site by the end of November, 1998.

Your letter of September 30, 1998 requested copies of all documents relating to the off-site disposal of wastes that have occurred to date from the site operations. Approximately 900 drums of IDW generated at the site were disposed on-site in 1996 in accordance with the disposal plans approved by WVDEP (1996). Since these IDW were non-hazardous and disposed of on-site, manifests were not prepared. Since that time, one drum of soil cuttings generated at ESI-3 was disposed of off-site as a hazardous waste. A copy of the manifest and supporting documentation is enclosed.

I hope that we have addressed your concerns at the site and upon implementation of our plan, the conditions outlined in the NOV will be rectified. If you have any questions or comments regarding the proposed actions, please contact Mr. Richard Meadows at (304) 529-5388.

Sincerely,



Dana Robertson
Colonel, Corps of Engineers
District Engineer

Enclosures

Copies Furnished:

→ Carletta Parlin, USEPA
H. Michael Dorsey, WVDEP
David J. Cunningham, WVDEP
Pete Costello, WVDEP



DIVISION OF ENVIRONMENTAL PROTECTION

Cecil H. Underwood
GOVERNOR

1356 Hansford Street
Charleston, WV 25301-1401

MICHAEL P. MIANO
DIRECTOR

September 4, 1998

**CERTIFIED MAIL
RETURN RECEIPT REQUESTED**

Rick Meadows, District Environmental Engineer
U.S. Army Corps of Engineers
Clean up of WV Ordnance Works
502 8th Street
Huntington, WV 25701

Dear Mr. Meadows:

Enclosed is a copy of the **Compliance Evaluation Inspection (CEI) Report** completed by representatives of the Chief of the Office of Waste Management. This report is based on the inspection conducted on August 19, 1998.

Please refer to the **Notice of Violation** for those violations discovered during the course of this inspection. As a result of those violations, this report is being referred for the following action:

<input type="checkbox"/>	Correct noted violations
<input checked="" type="checkbox"/>	Notice of Violation
<input type="checkbox"/>	Civil and Administrative Penalty (CAP)
<input type="checkbox"/>	Enforcement Referral

A copy of this report is being transmitted to the United States Environmental Protection Agency (U.S. EPA), Region III, Philadelphia, Pennsylvania.

Thank you for your assistance and cooperation. If you have any questions concerning the inspection or the attached report, please to contact Inspector David J. Cunningham at (304) 558-5989.

Sincerely,

Thomas A. Fisher, Inspector Supervisor
Compliance Assurance and Emergency Response

TAF/kw

cc: Carletta Parlin, U.S. EPA Region III
Inspector David J. Cunningham
File



DIVISION OF ENVIRONMENTAL PROTECTION

CECIL H. UNDERWOOD
GOVERNOR

Office of Waste Management
1356 Hansford Street
Charleston, WV 25301-1401

MICHAEL P. MIANO
DIRECTOR

NOTICE OF VIOLATION

DATE: August 19, 1998

TIME: 1040

ISSUED TO: U.S. Army Corps. Of Engineers - Clean up of WV Ordnance Works

EPA I.D.#: WVD980713036

FACILITY MAILING ADDRESS: 502 8th Street, Huntington, WV 2570

FACILITY REPRESENTATIVE: Rick Meadows - District Environmental Engineer

On the date and time specified, an authorized agent of the Chief of the Office of Waste Management conducted an inspection of the facility described above in accordance with West Virginia Code, Chapter 22, Section 18 and/or an Order or Permit issued pursuant to §22-18. During that inspection the following violation(s) were noted:

1. A. (Regulation) 40 CFR Part 262.11
B. (Facts) Facility failed to make a proper hazardous waste determination on all wastes generated.
2. A. 40 CFR Part 262.32
B. Facility failed to properly mark all containers of waste.
3. A. 40 CFR Part Subpart I Part 265.171
B. Facility failed to address the containers in poor condition.

In order to attain compliance with the cited Code and/or Regulations, you must perform the following remedial actions:

You must comply with the above-cited section(s) of the Regulations. It is recommended that you complete the following actions within 30 days of receipt of this Notice:

1. Immediately start a process to evaluate and make proper hazardous waste determinations on all possible hazardous wastes.
2. Immediately make inventory and mark all containers of hazardous waste with proper wording and labels.
3. Immediately start a program to address all containers in poor condition.

Document your compliance by writing to the Chief, Office of Waste Management, 1356 Hansford Street, Charleston, WV 25301 and send a photocopy or facsimile of that correspondence to this inspector.

A copy of this Notice of Violation will be forwarded to the Enforcement Unit of the Office of Waste Management. The issuance of this Notice may result in an administrative civil penalty being levied in accordance with West Virginia Code §22-18-17.

District Phone: (304) 558-5989

Issued by: David Cunningham

District Fax: (304) 558-0256

Title: Environmental Inspector



DIVISION OF ENVIRONMENTAL PROTECTION

CECIL H. UNDERWOOD
GOVERNOR

Office of Waste Management
1356 Hansford Street
Charleston, WV 25301-1401

MICHAEL P. MIANO
DIRECTOR

NOTICE OF VIOLATION

DATE: August 19, 1998

TIME: 1040 hours

ISSUED TO: U.S. Army Corps of Engineers - Clean up of WV Ordnance Works

EPA I.D.#: WVD980713036

FACILITY MAILING ADDRESS: 502 8th Street, Huntington, WV 25701

FACILITY REPRESENTATIVE: Rick Meadows - District Environmental Engineer

On the date and time specified, an authorized agent of the Chief of the Office of Waste Management conducted an inspection of the facility described above in accordance with West Virginia Code, Chapter 22, Section 18 and/or an Order or Permit issued pursuant to §22-18. During that inspection the following violation(s) were noted:

1. A. (Regulation) 40 CFR Part 265.31
B. (Facts) Facility failed to operate in a manner to prevent the possibility of sudden or non-sudden release of hazardous waste constituents to air, soil, or surface water which may cause harm to human health or the environment.
2. A. 40 CFR Part 265.15
B. Facility failed to conduct adequate inspections of the site to check for deterioration and discharges which may lead to releases of hazardous waste constituents to the environment.
3. A. 40 CFR Subpart I Part 265.174
B. Facility failed to conduct inspections where containers are stored, at least weekly, for leaks and deterioration.

In order to attain compliance with the cited Code and/or Regulations, you must perform the following remedial actions within 30 days of receipt of this Notice:

1. Immediately start a program to assess the containers on site and remove and properly dispose of them.
2. Immediately set up a program to start conducting proper inspection at this site.
3. Immediately start conducting weekly inspections of the container storage area.

A copy of this Notice of Violation will be forwarded to the Enforcement Unit of the Office of Waste Management. The issuance of this Notice may result in an administrative civil penalty being levied in accordance with West Virginia Code §22-18-17.

District Phone: (304) 558-5989

Issued by: David Cunningham

District Fax: (304) 558-0256

Title: Environmental Inspector

COMPLIANCE EVALUATION INSPECTION

RE: U.S. Army Corps of Engineers - Clean up WV Ordnance Works
McClintic Wildlife Station
Pt. Pleasant, WV
EPA Identification Number: WVD980713036

DATE INSPECTED: August 19, 1998

INSPECTED BY: Dave Cunningham, WV DEP/OWM
Tom Fisher, WV DEP/OWM
Pete Costello, WV DEP/OWM

REPORT BY: Dave Cunningham

On August 19, 1998 at approximately 1040 hours, the above referenced West Virginia Division of Environmental Protection Office of Waste Management employees arrived at the McClintic Wildlife Area and more specifically the site of the storage and treatment of materials generated in the clean up of the WV Ordnance Works. Upon our arrival we were met by Mr. Frank Albert and Mr. Steve Thompson, Environmental Engineers with the U.S. Army Corps of Engineers, Huntington District. We introduced ourselves to these gentlemen and advised them of the purpose of our visit.

Mr. Thompson advised us that all of the soil and liquid wastes that had been generated during the drilling and development of the wells at this site, as well as any other investigative wastes, had been drummed up and stored inside a locked fenced area. The fenced area is the office and storage area for the environmental consultants, International Technologies. We asked Mr. Thompson and Mr. Albert if they had any records of analysis or hazardous waste shipping manifests generated as part of this project. They advised that they did not think that these records were on site, but they were probably at their offices at Huntington. They further advised that there had been one shipment of approximately 900 drums removed from this fenced area last year.

We immediately proceeded to the fenced storage area to conduct our inspection. Upon arrival here we found that there were approximately 300 to 400 metal 55 gallon drums sitting around the building at this site. These drums were all sitting outside with no cover or protection afforded them. All of the drums were suffering from rust and deterioration. Many of the drums were bulging on the

tops and bottoms from freezing, and several of them had fallen over because of this and the contents had leaked out onto the ground. Many of the drums were sitting on wooden pallets, but because of the amount of time that they had been sitting out in the elements, some of the pallets had rotted away allowing the drums on them to fall over. High weeds and brush had overtaken the storage area making inspection of the drums difficult.

Many of the drums that we looked at were dated 1993, even more of them were dated 1994, with the remainder 1995, 1996, 1997. The largest percentage of these drums was labeled "Investigative Waste"; however, there were several drums that were labeled as various other waste streams. Of these other waste streams, the ones that were of the most concern and would appear to be RCRA violations were as follows: One drum labeled "Lab Waste - Sample Prep 10-30-94 this drum was empty and had apparently leaked out due to rust holes. One drum labeled "Sample Waste Bottles - Lab Waste Including Preservatives 11-15-93". Two drums labeled "Waste Glass TNT Screenings 11-13-93". There were also seven yellow overpack drums with no labeling or any type of indication of what was in them. (We were told later by Mr. Albert and Mr. Thompson that they thought that last year when they disposed of part of the drums that were stored here, there were seven "leakers" placed in these overpacks.)

During this walk through we found at least 6 drums that had fallen over and most or all of the contents had leaked out onto the ground. Photos were taken of the area showing pertinent facts of the conditions that we found.

We also checked inside of the building and found hundreds of samples jars (4 ounce, 8 ounce, and 16 ounce) full of soil samples. These were stacked along both the east and west walls of the structure.

Once we had completed the inspection of this site we advised Mr. Albert and Mr. Thompson

of our findings. We advised that the management of these drums was very poor and that all but the seven overpack drums showed severe signs of rust and deterioration. We pointed out the "Lab Waste", "TNT Screening", and "UNK" drums, and told them that there would probably be RCRA violations associated with this inspection. Both men apologized for the problems created by allowing this many drums to accumulate in an area uncovered to the elements. They told us that they had tried to get attention to the problems, and because of circumstances beyond their control, could not get approval to have the situation taken care of.

This completed our inspection, so we thanked Mr. Albert and Mr. Thompson for their help and cooperation and departed the site at approximately 1225 hours.

COMPLIANCE EVALUATION

1. Facility failed to make a proper hazardous waste determination on wastes generated, in violation of **40 CFR Part 262.11**.
2. Facility failed to properly mark all containers of waste (the 6 or 7 containers marked "UNK"), in violation of **40 CFR Part 262.32**.
3. Facility failed to address the containers in poor condition in violation of **40 CFR Subpart I Part 265.171**.
4. Facility failed to conduct inspections where containers are stored, at least weekly, looking for leaks and deterioration caused by corrosion or other factors in violation of **40 CFR Subpart I Part 265.174**.
5. Facility failed to operate in a manner to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which would threaten human health or the environment in violation of **40 CFR Part 265.31**.
6. Facility failed to inspect the facility for malfunctions and deteriorations, operator errors, and discharges which may be causing or may lead to a release of hazardous waste constituents to the environment etc., in violation of **40 CFR Part 265.15 et al.**